

IN THE CLAIMS:

5011A > 1. (previously amended) A method of managing a network switch having a processor card including a memory and a processing unit in the processor card comprising:

detecting an error;

determining if the error is ignorable;

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determining whether a threshold has been reached if the error is determined to be ignorable, the threshold corresponding to a number of hitless rebuilds that have occurred within an amount of time; and,

performing a hitless rebuild in the processor card if the threshold has not been reached.

2. (previously amended) The method of claim 1, wherein the performing of the hitless rebuild includes:

performing an initialization of the memory; and,

protecting a portion of the memory from access by the processing unit during the initialization.

3. (previously amended) The method of claim 1, wherein the performing of the includes]protecting a portion of the memory that contains a set of routing tables.

4. (previously amended) The method of claim 1, wherein the performing of the hitless rebuild further comprises protecting a portion of the memory that contains a set of state tables.

5. (currently amended) The method of claim 1, wherein the memory is accessed through a set of memory addresses and the performing of [a]the hitless rebuild further comprises preventing the processing unit from accessing a predetermined set of memory addresses in the set of memory addresses.

6. (canceled)

7. (previously amended) The method of claim 1, further comprising setting the processing unit to enter into a degraded mode if the error is not ignorable and if the threshold has been reached.

8. (canceled)

9. (previously amended) An apparatus for managing a network switch having a processor card including a memory and a processing unit in the processor card comprising:

means for detecting an error;

means for determining if the error is ignorable;

means for determining whether a threshold has been reached if the error is determined to be ignorable, the threshold corresponding to a number of hitless rebuilds that have occurred within an amount of time; and,

means for performing a hitless rebuild in the processor card if the threshold has not been reached.

10. (previously amended) An article comprising a machine readable medium having instructions stored thereon which, when executed, cause a method to be performed, the method comprising:

detecting an error;

determining if the error is an ignorable error;

determining whether a threshold has been reached if the error is determined to be an ignorable, the threshold corresponding to a number of hitless rebuilds that have occurred within an amount of time; and,

performing a hitless rebuild in a processor card if the threshold has not been reached.

11. (currently amended) The article of claim 10, wherein the [the] method further comprises:

performing an initialization of the memory; and,

protecting a portion of the memory from access by the processing unit during the initialization.

12. (previously amended) The article of claim 10, wherein the method further comprises:

protecting a portion of the memory that contains a set of routing tables.

13. (previously amended) The article of claim 10, wherein the method further comprises:

protecting a portion of the memory that contains a set of state tables.

14. (previously amended) The article of claim 10, wherein the memory further comprises:

preventing a processing unit from accessing a predetermined set of memory addresses in the set of memory addresses.

15. (canceled)

16. (previously amended) The article of claim 10, wherein the method further comprises:

setting of the processing unit to enter into a degraded mode if the threshold has been reached.:

17. (canceled)

18. (currently amended) A method, comprising:

re-initializing software that is executed on a networking device card, said re-initializing in response to an error, said networking device card comprising a processor that executes said software, said networking device card comprising a memory that stores information that can be used by said processor to execute said software, said information further comprising a routing table, said re-initializing not deleting said routing table information from said memory.

19. (previously added) The method of claim 18 wherein said memory further comprises non-volatile memory.

20. (previously added) The method of claim 18 wherein said memory further comprises volatile memory.

21. (previously added) The method of claim 20 wherein said volatile memory further comprises random access memory.

22. (previously added) The method of claim 21 wherein said random access memory further comprises dynamic random access memory.

23. (currently amended) A method, comprising:

re-initializing software that is executed on a networking device card, said re-initializing in response to an error, said networking device card comprising a processor that executes said software, said networking device card comprising a memory that stores information that can be used by said processor to execute said software, said information further comprising a state table, said re-initializing not deleting said state table information from said memory.

24. (previously added) The method of claim 23 wherein said memory further comprises non-volatile memory.

25. (previously added) The method of claim 23 wherein said memory further comprises volatile memory.

26. (previously added) The method of claim 25 wherein said volatile memory further comprises random access memory.

27. (previously added) The method of claim 26 wherein said random access memory further comprises dynamic random access memory.

28. (currently amended) An apparatus, comprising:

a networking device card, said networking device card comprising a processor that executes re-initializable software, said networking device card comprising a memory that stores information that can be used by said processor to execute said re-initializable software, said information further comprising a routing table, said re-initializable software able to be re-initialized in response to an error[, said re-initializing not deleting] in a manner that does not cause said routing table information to be deleted from said memory.

29. (previously added) The method of claim 28 wherein said memory further comprises non-volatile memory.

30. (previously added) The method of claim 28 wherein said memory further comprises volatile memory.

31. (previously added) The method of claim 30 wherein said volatile memory further comprises random access memory.

32. (previously added) The method of claim 31 wherein said random access memory further comprises dynamic random access memory.

33. (currently amended) An apparatus, comprising:

a networking device card, said networking device card comprising a processor that executes re-initializable software, said networking device card comprising a memory that stores information that can be used by said processor

to execute said re-initializable software, said information further comprising a state table, said re-initializable software able to be re-initialized in response to an error[, said re-initializing not deleting] in a manner that does not cause said state table information to be deleted from said memory.

34. (previously added) The method of claim 33 wherein said memory further comprises non-volatile memory.

35. (previously added) The method of claim 33 wherein said memory further comprises volatile memory.

36. (previously added) The method of claim 35 wherein said volatile memory further comprises random access memory.

37. (previously added) The method of claim 36 wherein said random access memory further comprises dynamic random access memory.

38. (currently amended) An article comprising a machine readable medium having instructions stored thereon which, when executed, cause a method to be performed, the method comprising:

re-initializing software that is executed on a networking device card, said re-initializing in response to an error, said networking device card comprising a processor that executes said software, said networking device card comprising a memory that stores information that can be used by said processor to execute

said software, said information further comprising a routing table, said re-initializing not deleting said routing table information from said memory.

39. (previously added) The article of claim 38 wherein said memory further comprises non-volatile memory.

40. (previously added) The article of claim 38 wherein said article is non-volatile memory.

41. (previously added) The article of claim 38 wherein said memory further comprises volatile memory.

42. (previously added) The article of claim 41 wherein said volatile memory further comprises random access memory.

43. (previously added) The article of claim 42 wherein said random access memory further comprises dynamic random access memory.

44. (currently amended) An article comprising a machine readable medium having instructions stored thereon which, when executed, cause a method to be performed, the method comprising:

re-initializing software that is executed on a networking device card, said re-initializing in response to an error, said networking device card comprising a processor that executes said software, said networking device card comprising a

memory that stores information that can be used by said processor to execute said software, said information further comprising a state table, said re-initializing not deleting said state table information from said memory.

45. (currently amended) The [method]article of claim 44 wherein said memory further comprises non-volatile memory.

46. (currently amended) The [method]article of claim 44 wherein said article is non-volatile memory.

47. (currently amended) The [method]article of claim 44 wherein said memory further comprises volatile memory.

48. (currently amended) The [method]article of claim 47 wherein said volatile memory further comprises random access memory.

49. (currently amended) The [method]article of claim 48 wherein said random access memory further comprises dynamic random access memory.

50. (new) An apparatus, comprising:

means for re-initializing software that is executed on a networking device card, said re-initializing in response to an error, said networking device card comprising a processor that executes said software, said networking device card comprising a memory that stores information that can be used by said processor

to execute said software, said information further comprising a routing table, said means for re-initializing further comprising means for not deleting said routing table information from said memory.

51. (new) The apparatus of claim 50 wherein said memory further comprises non-volatile memory.

52. (new) The apparatus of claim 50 wherein said memory further comprises volatile memory.

53. (new) The apparatus of claim 52 wherein said volatile memory further comprises random access memory.

54. (new) The apparatus of claim 53 wherein said random access memory further comprises dynamic random access memory.

55. (new) An apparatus, comprising:

means for re-initializing software that is executed on a networking device card, said re-initializing in response to an error, said networking device card comprising a processor that executes said software, said networking device_card comprising a memory that stores information that can be used by said processor to execute said software, said information further comprising a state table, said means for re-initializing further comprising means for not deleting said state table information from said memory.

56. (new) The apparatus of claim 55 wherein said memory further comprises non-volatile memory.

57. (new) The apparatus of claim 55 wherein said memory further comprises volatile memory.

58. (new) The apparatus of claim 57 wherein said volatile memory further comprises random access memory.

59. (new) The apparatus of claim 58 wherein said random access memory further comprises dynamic random access memory.